

In the Claims:

1-55. (Canceled)

55. (Currently Amended) A method of operating a cell phone, comprising:

receiving auxiliary data wirelessly sent to the cell phone from a remote transmitter;

thereafter, receiving input information and expressing the input information in digital form;

~~receiving data wirelessly sent from a remote transmitter;~~

steganographically encoding the input information to hide a plural-bit auxiliary code therein, the encoding depending, at least in part, on the received auxiliary data sent to the cell phone from the remote transmitter; and

transmitting the steganographically-encoded information from the cell phone by wireless in a digital format;

wherein;

the input information is digitally marked with the plural-bit auxiliary code prior to being transmitted, but such code is hidden due to its steganographic nature;

the plural-bit auxiliary code is retrievable only by entities that (1) receive the information sent by the cell phone; (2) know that a code is present despite being hidden, and (3) have information about its manner of encoding; and

the method thereby provides a hidden channel through which a code dependent on auxiliary data earlier sent to a cell phone can be transmitted from the cell phone.

56. (Canceled)

57. (Currently Amended) The method of claim [[56]] 55 in which the input information is audio information.

58-59. (Canceled)

60. (Currently Amended) The method of claim 55 wherein the steganographic encoding includes additionally combining samples of a digital overlay signal with corresponding samples of the input information, the overlay signal being dependent both on the plural-bit auxiliary code and on the input information.

61-65. (Canceled)

66. (Currently Amended) A cell phone including a data capture system and a radiant-energy transmission system, characterized in that the cell phone further includes a steganographic encoder that hides a plural-bit auxiliary code within host data captured by the data capture system prior to any compression thereof and prior to transmission by the data transmission system, the host data comprising sample values, and the steganographic encoder being adapted to increase certain of the sample values and decrease others, wherein data captured by the data capture system is digitally marked with the plural-bit auxiliary code prior to being transmitted by the transmission system.

67. (Previously Presented) The cell phone of claim 66 wherein the steganographic encoder is adapted to increase certain of the sample values between 7.5% and 100%.

68-69. (Canceled)

70. (Previously Presented) The method of claim 55 that further includes wirelessly communicating an identifier from the cell phone, wherein said plural-bit auxiliary code is at least partially redundant with said identifier, so that at least part of said identifier is sent from the cell phone in two different manners.

71. (Previously Presented) The method of claim 55 wherein said plural-bit auxiliary code comprises an identifier uniquely identifying the cell phone, rather than identifying the input information or a user of cell phone.

72-74. (Canceled)

75. (Withdrawn) A method of steganography usage in a wireless phone device, comprising:

receiving data wirelessly sent from a remote transmitter;

generating an encoding signal that depends on said received data wirelessly sent from the remote location;

altering digital data in accordance with said encoding signal to yield steganographically encoded data; and

wirelessly transmitting the steganographically-encoded data from the wireless phone device to a remote location.

76. (Withdrawn) A method of steganography usage in a wireless phone device, comprising:

by reference to input digital data and to plural-bit auxiliary data, generating an encoding signal that represents said plural-bit auxiliary data and that depends, in part, on said input digital data;

altering said input digital data in accordance with said encoding signal to yield steganographically encoded data; and

wirelessly transmitting the steganographically-encoded data to a remote location.

77. (Withdrawn) A method of steganography usage in a wireless phone device, comprising:

wirelessly communicating an identifier from said wireless phone device to a remote location; and

separately, conveying at least a portion of said identifier from said wireless phone device to said remote location through use of steganographic encoding of an information signal transmitted by said wireless phone device;

wherein said identifier is sent from said wireless phone device in two different manners.

78. (Withdrawn) A method of steganography usage in a wireless phone device, comprising:

- in a first transmission of information from said wireless phone device, steganographically encoding the information with a first encoding signal;

- in a subsequent transmission of information from said wireless phone device, steganographically encoding the information with a second encoding signal different than the first;

wherein said first and second encoding signals differ by reason of at least one of the following:

- different first and second data wirelessly received by said wireless phone device from a remote location, on which said encoding signals depend; or

- the first encoding signal encodes a first identifier, and the second encoding signal also encodes said first identifier, but represents said first identifier with a different encoding signal than the first encoding signal.

79. (Withdrawn) A method of steganography usage in a wireless phone device, comprising:

- processing an information signal to steganographically encode the information signal with auxiliary data including an identifier;

- modulating a carrier signal with said steganographically encoded information signal; and

- transmitting said modulated carrier signal;

wherein said identifier comprises data uniquely identifying the wireless device, rather than identifying the information signal or a user of said wireless phone device.

80. (Withdrawn) A wireless phone device including a data capture system, a radiant-energy digital data transmission system, and radio receiver circuitry, characterized in that the wireless phone device includes processing circuitry and memory, the memory containing programming causing the processing circuitry to perform the following acts:

store data obtained by use of said radio receiver circuitry;
generate an encoding signal that depends, at least in part, on said stored data; and
alter a representation of data captured by the data capture system in accordance
with said encoding signal to yield a steganographically encoded signal;
wherein said digital data transmission system includes an input to which said
steganographically encoded signal is provided.

81. (New) A method of operating a cell phone, comprising:
receiving input information and expressing the input information in digital form
comprising plural digital values;
applying a steganographic encoding process to the input information to hide a
plural-bit auxiliary code therein; and
transmitting the steganographically-encoded information from the cell phone by
wireless in a digital format;
wherein the encoding depends on dynamics of the input information, so that the
encoding applied to one digital value of the input information depends on a relationship
between that digital value and one or more other digital values of the input information.

82. (New) The method of claim 81 wherein the input information comprises
audio, and the encoding depends on a rate of change of digital samples representing said
audio.

83. (New) A method of operating a cell phone, comprising:
receiving input information and expressing the input information in digital form
comprising plural digital values;
applying a steganographic encoding process to the input information to hide a
plural-bit auxiliary code therein; and
transmitting the steganographically-encoded information from the cell phone by
wireless in a digital format;
wherein:

the encoding depends on a pseudo-random signal, so that the encoding has a pseudo-random aspect;

the input information is digitally marked with the plural-bit auxiliary code prior to being transmitted, but such code is hidden due to its steganographic nature;

the plural-bit auxiliary code is retrievable only by entities that (1) receive the information sent by the cell phone; (2) know that a code is present despite being hidden, and (3) have information about the pseudo-random signal; and

the input information can be transmitted from the cell phone without pseudo-random processing, but conveys a hidden code that has a pseudo-random aspect.

84. (New) The method of claim 83 wherein the input information comprises audio.

85. (New) The cell phone of claim 66 wherein the host data comprises audio data.